

Amdt. dated November 22, 2005
Reply to Office action of August 23, 2005

Serial No. 10/719,129
Docket No. TUC920030145US1
Firm No. 0022.0063

REMARKS/ARGUMENTS

Claims 1-24 are pending in the application. Claims 1, 9, and 17 have been amended. Reconsideration is respectfully requested. Applicants submit that the pending claims 1-24 are patentable over the art of record and allowance is respectfully requested of claims 1-24.

Applicants would like to thank Examiner Sun for holding a telephone interview with their representative, Janaki K. Davda, on Monday, November 21, 2005 at 2:00 EST. Claims 1 and 4 and the cited prior art were discussed. Applicants' representative agreed to amend the claims to clarify that notification is done by sending a message. No other agreement was reached.

Claims 1, 5-8, 9, 13-16, 17, and 21-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Reinemann (Pub. US 2003/0115118 A1). Applicants respectfully traverse.

Applicants claimed invention is directed to throttling data transfer. An amount of resources that are in use is determined. When the amount of resources reaches a high threshold, one or more primary control units are notified to temporarily stop sending data by sending a message and, when the amount of resources reaches a low threshold, each previously notified primary control unit is notified to resume sending data by sending a message.

The Reinemann patent application describes a technique in which processors share or trade their respective resources (Abstract). With the Reinemann patent application, when any of the sharable resources operates above the upper threshold, if the resource is currently shared by any of the other processors, a policy manager will discourage the other processors from using the resource by invoking an out-of-range process (paragraph 13). Similarly, in paragraph 25, the Reinemann patent application describes reducing usage. Discouraging use of a resource or reducing usage does not anticipate notifying one or more primary control units to temporarily stop sending data.

In paragraph 35, the Reinemann patent application describes that if consumption exceeds a limit, the policy manager sets a flag, causing a hosted process I/O to return a disk-full message. Examiner Sun indicated that setting the flag was interpreted to be notifying. Applicants respectfully traverse. The claimed notifying is performed "by sending a message" to temporarily stop sending data, therefore, setting a flag does not anticipate, and, in fact, teaches away from the

Amdt. dated November 22, 2005
Reply to Office action of August 23, 2005

Serial No. 10/719,129
Docket No. TUC920030145US1
Firm No. 0022.0063

claimed subject matter. In addition, sending a disk full message does not anticipate sending a message to temporarily stop sending data. Also, Applicants' Specification describes that the message is not an error message, but a message indicating that the primary control unit is to halt data transfer temporarily (e.g., page 11, paragraph 39).

Because the Reinemann patent application describes discouraging use of a resource, reducing usage or setting a flag and sending a disk-full message, the Reinemann patent application does not anticipate, and, in fact, teaches away from the claimed notification to temporarily stop sending data with a message.

Also, the Reinemann patent application in paragraph 21 describes a lower threshold below which a resource will become available to other processors, but there is no indication that each previously notified primary control unit is notified to resume sending data. Examiner Sun indicated that clearing the flag was interpreted to be notifying. Applicants respectfully traverse. Notifying is performed "by sending a message" to temporarily stop sending data, therefore, clearing a flag does not anticipate, and, in fact, teaches away from the claimed subject matter.

Therefore claim 1 is not anticipated by the Reinemann patent application. Claims 9 and 17 are not anticipated by the Reinemann patent application for at least the same reasons as were discussed with respect to claim 1.

Dependent claims 5-8, 13-16, and 21-24 incorporate the language of independent claims 1, 9, and 17 and add additional novel elements. Therefore, dependent claims 5-8, 13-16, and 21-24 are not anticipated by the Reinemann patent application for at least the same reasons as were discussed with respect to claims 1, 9, and 17.

Claims 2, 10, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reinemann in further view of Applicants' admitted prior art. Applicants respectfully traverse.

With reference to claim 1, the Reinemann patent application describes setting and clearing a flag, which teaches away from the claimed notifications by sending messages to temporarily stop sending data and to resume sending data. Therefore, the Reinemann patent application does not teach or suggest the subject matter of claim 1.

The prior art described in Applicants' Specification describes sending a message to all primary storage subsystems to wait a fixed time-out period. Because the primary storage subsystems know to wait a fixed time-out period, there is no need to send a notification to

Amdt. dated November 22, 2005
Reply to Office action of August 23, 2005

Serial No. 10/719,129
Docket No. TUC920030145US1
Firm No. 0022.0063

resume sending data. Thus, this prior art teaches away from the claimed notification of each previously notified primary control unit to resume sending data. Therefore, claims 1, 9, and 17 are not taught or suggested by the Reinemann patent application or Applicants' admitted prior art, either alone or in combination.

Dependent claims 2, 10, and 18 incorporate the language of independent claims 1, 9, and 17 and add additional novel elements. Therefore, dependent claims 2, 10, and 18 are not taught or suggested by the Reinemann patent application or Applicants' admitted prior art, either alone or in combination for at least the same reasons as were discussed with respect to claims 1, 9, and 17.

Claims 3-4, 11-12, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reinemann and further in view of Wong (Pub. US 2004/0003069 A1). Applicants respectfully traverse.

With reference to claim 1, the Reinemann patent application describes setting and clearing a flag, which teaches away from the claimed notifications by sending a message. Therefore, the Reinemann patent application does not teach or suggest the subject matter of claim 1.

The Wong patent application does not cure the defects of the Reinemann patent application. With reference to claim 1, the Wong patent application describes that a PAUSE frame is sent from a device to a source, which will stop sending new packets for a time period specified by the PAUSE packet (paragraph 56). Because a device knows to resend packets after the time period specified by the PAUSE packet, the Wong patent application teaches away from notifying each previously notified primary control unit to resume sending data. Therefore, the Wong patent application does not teach or suggest the subject matter of claim 1.

Thus, neither the Reinemann patent application nor the Wong patent application, either alone or together, teaches or suggests the subject matter of claims 1, 9, and 17.

Dependent claims 3-4, 11-12, and 19-20 incorporate the language of independent claims 1, 9, and 17 and add additional novel elements. Therefore, dependent claims 3-4, 11-12, and 19-20 are not taught or suggested by the Reinemann patent application or the Wong patent application, either alone or in combination for at least the same reasons as were discussed with respect to claims 1, 9, and 17.

Amdt. dated November 22, 2005
Reply to Office action of August 23, 2005

Serial No. 10/719,129
Docket No. TUC920030145US1
Firm No. 0022.0063

Additionally, claims 4, 12, and 20 describe that when the amount of resources used is above a *final threshold*, the one or more primary control units are re-notifying to temporarily stop sending data. The final threshold is a third threshold, in addition to the high threshold and low threshold of claims 1, 9, and 17. The Reinemann patent application describes an upper threshold and a lower threshold (paragraph 13), which teaches away from the claimed use of low, high, and final thresholds. Also, the Wong patent application describes a high watermark and a low watermark (paragraph 56), which teaches away from the claimed use of low, high, and final thresholds.

Conclusion

For all the above reasons, Applicants submit that the pending claims 1-24 are patentable over the art of record. Applicants have not added any claims. Nonetheless, should any additional fees be required, please charge Deposit Account No. 09-0466.

The attorney of record invites the Examiner to contact her at (310) 553-7973 if the Examiner believes such contact would advance the prosecution of the case.

Dated: November 22, 2005

By: 

Janaki K. Davda
Registration No. 40,684

Please direct all correspondences to:

David Victor
Konrad Raynes & Victor, LLP
315 South Beverly Drive, Ste. 210
Beverly Hills, CA 90212
Tel: 310-553-7977
Fax: 310-556-7984